Plans for next weeks
-
High mass data

Dominik Wrana

Data sample

Gap data from runs:
292319,294607,294630,294773,294775,294777

Central triggers: 2 CEM0.5 & 2 CJET0.5

Conditions:
- clean calorimeter for $|\eta| > x$
  (x = 0.6, 1.1, 1.6, 2.1)
- crap events rejected – Artur's neural net

To do – energies

1. Check if triggers were working fine
2. Sum Et plots
3. MEt plots
4. Sum Et vs MEt 2D plots
5. Fit proper functions to sum Et plots (exponentials or power laws)
6. One big plot with all sum Et distributions
7. EM ratios for differents bands of sum Et
8. EM ratios distributions vs sum Et 2D plots
9. EM ratios mean values vs sum Et 2D plots

Simulations?
Mass plots?

To do 2 – XXX data

For 0 bias data (only ~ 300k events !):
- Low luminosity - < 50 * 10^30
- 0 or 1 vertex only (vertex multiplicity – to be checked)
- Crap events cleanup

The same plots as for GXG data for comparision.

To do 3 – shape, jets

For GXG data:
- Events shape variables:
   1. Circularity C for differents bands of sum Et
   (0-4; 4-6;   6-9; 9-14; 14+ MeV)
   2. Thrust T for the same bands od sum Et

- Use jet algorithms - midpoint or K_T (implemented in stntuple?):
   3. Fractions of events with certain number of jets with Et > threshold vs sum Et in an event
   4. DBS (double bremsstrahlung) and DPS (double parton scattering) observations

Skype meeting, Dominik Wrana

To do 4 - tracks

For GXG data:
- range of $|\eta| < 1.1$ or $|\eta| < 0.6$
- fiducial box of Pt and $|\eta|$ (to be checked)
- primary vertex? - only above 4 tracks $\rightarrow$ construction of a homemade vertices
- using only beam constrained parameters
- tracks quality or better statistics ?

1. Tracks multiplicity in a different ranges of sum Et
2. Tracks multiplicity mean values vs sum Et
Rather large tracks Pt due to quality cuts $\rightarrow$ not good particle identification?
Lambdas, K shorts?